RUN FORECASTS AND HARVEST PROJECTIONS FOR 1998 ALASKA SALMON FISHERIES AND REVIEW OF THE 1997 SEASON: THE SHORT VERSION

Edited by

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The Alaska Department of Fish and Game is expecting an overall increase in commercial salmon harvests in 1998. The 1998 commercial catch projection of 146 million is distributed as 598 thousand chinook, 36.5 million sockeye, 6.26 million coho, 85.6 million pink, and 17.4 million chum salmon. Table 1 shows specific projection numbers by species and fishing area.

This 1998 projected harvest is somewhat higher than the 1997 actual all-species commercial harvest of 123 million salmon. In 1997 the commercial catches were generally below preseason projections. Chinook salmon catches were an exception to this rule, while coho runs were far lower than expected in most areas. Even so, the overall level of commercial catch is still quite high by historical standards. We suspect that last year's shortfall was due to unobserved changes in ocean conditions. If these conditions continue, this year's projections could be too high as well. The 1997 commercial harvest is broken down as 662 thousand chinook, 31.1 million sockeye, 3.15 million coho, 71.9 million pink, and 16.2 million chum salmon. Table 2 shows harvest numbers by species and fishing area, in units of fish harvested, and Table 3 provides this information in units of pounds harvested.

The exvessel value of the 1997 commercial harvest continued its downward trend. The preliminary estimate for 1997's harvest is \$274 million — well below the estimates of \$378 million for 1996, \$466 million for 1995, and \$489 million for 1994.

The 1997 Bristol Bay sockeye run was considerably under forecast. The 1997 forecast was for a return of 35.8 million, with an in-Bay catch of 24.8 million. The actual run was 20.1 million, with an in-Bay catch of 12.3 million. Because of this forecast error, the department reviewed its forecasting methods and looked at using additional information that might improve this year's forecast. However, we were unable to provide a convincing explanation for last year's shortfall and therefore did not change our procedures. The forecast for 1998 is for a run of 32.1 million and an in-Bay catch of 20.6 million.

Biologists in Southeast Alaska are expecting a *strong* run of pink salmon with catches in the range of 36 to 50 million. Biologists in Prince William Sound are forecasting a run of 26.0 million pink salmon and a commercial catch of 23.3 million. The forecast for the Copper River sockeye run is 2.74 million and a catch of 2.14 million. Biologists in Upper Cook Inlet forecast a sockeye run of 4.0 million and a catch of 2.5 million. Biologists in Kodiak are forecasting a pink run of 10.8 million and a catch of 6.3 million.

Look for inseason harvest information, postseason statistics, and other information about salmon in Alaska on the World Wide Web at http://www.state.ak.us/adfg/cfmd/cfmdhome.htm.

Table 1. Preliminary projections of 1998 Alaska commercial salmon harvests by fishing area and species, in thousands of fish.

Fishing Area	Species						
	Chinook	Sockeye	Coho	Pink	Chum	Total	
Southeast Region	247	2,500	3,500	43,000	11,300	60,500	
Dulings William Cound							
Prince William Sound	50	2.210	546	11 000	600	14 400	
Common Property	0	2,210 181	346 16	11,000		14,400	
Cost Recovery	•		300	12,300 300	440 200	12,900	
Upper Cook Inlet	17	2,500				3,320	
Lower Cook Inlet	1	323	15	2,790	11	3,140	
Bristol Bay	84	20,600	90	400	700	21,900	
Central Region	152	25,800	967	26,800	1,950	55,700	
TZ - 1:-1- A	20	2.250	200	(250	(50	0.670	
Kodiak Area	20	2,350	300	6,350	650	9,670	
Chignik	7	1,070	235	1,100	270	2,680	
South Peninsula	10	2,460	255	6,800	1,600	11,100	
North Peninsula	10	2,100	180	200	150	2,640	
Aleutian Islands	0	5	0	500	1	506	
Westward Region	47	7,990	970	15,000	2,670	26,700	
AXZZ D	150	105		015	1 470	2.440	
AYK Region	152	185	822	815	1,470	3,440	
Statewide Total	598	36,500	6,260	85,600	17,400	146,000	

Columns and rows do not total exactly due to rounding.

Modified January 30, 1998

Table 2. Preliminary 1997 Alaska commercial salmon harvests by fishing area and species, in thousands of fish.

Fishing Area	Species						
	Chinook	Sockeye	Coho	Pink	Chum	Total	
Southeast Region	304	2,500	1,950	29,000	11,700	45,500	
Prince William Sound	52	4,200	83	25,800	2,200	32,300	
Upper Cook Inlet	13	4,090	144	71	89	4,410	
Lower Cook Inlet	1	240	9	2,810	6	3,070	
Bristol Bay	76	12,300	50	0	307	12,700	
Central Region	143	20,800	287	28,700	2,600	52,500	
Kodiak Area	19	2,500	381	11,000	520	14,400	
Chignik	3	770	91	844	156	1,860	
South Peninsula	7	2,240	112	2,300	606	5,260	
North Peninsula	10	2,150	95	51	97	2,400	
Aleutian Islands					_	0	
Westward Region	39	7,660	678	14,200	1,380	24,000	
AYK Region	175	123	234	0	530	1,060	
Statewide Total	662	31,100	3,150	71,900	16,200	123,000	

Missing data indicate no harvest, and zeros indicate harvest activity but <1,000. Columns and rows do not total exactly due to rounding.

Modified January 30, 1998

Table 3. Preliminary 1997 Alaska commercial salmon harvests by fishing area and species, in thousands of pounds.

Fishing Area	Species						
	Chinook	Sockeye	Coho	Pink	Chum	Total	
Southeast Region	5,170	16,200	15,600	116,000	99,400	252,000	
Prince William Sound	1,250	27,200	623	97,100	18,900	145,000	
Upper Cook Inlet	213	26,800	936	213	596	28,800	
Lower Cook Inlet	21	1,580	62	8,440	40	10,100	
Bristol Bay	1,250	72,600	330	0	2,000	76,200	
Central Region	2,730	128,000	1,950	106,000	21,500	260,000	
Kodiak Area	187	13,300	3,050	37,500	4,160	58,200	
Chignik	47	4,850	709	2,790	1,230	9,630	
South Peninsula	113	12,900	877	7,600	4,250	25,700	
North Peninsula	161	12,400	744	168	680	14,200	
Aleutian Islands				_		0	
Westward Region	508	43,500	5,380	48,100	10,300	108,000	
AYK Region	3,370	873	1,730	0	3,970	9,940	
Statewide Total	8,430	188,000	23,000	270,000	131,000	620,000	

Missing data indicate no harvest, and zeros indicate harvest activity but <1,000. Columns and rows do not total exactly due to rounding.

Modified January 30, 1998

Chinook Salmon

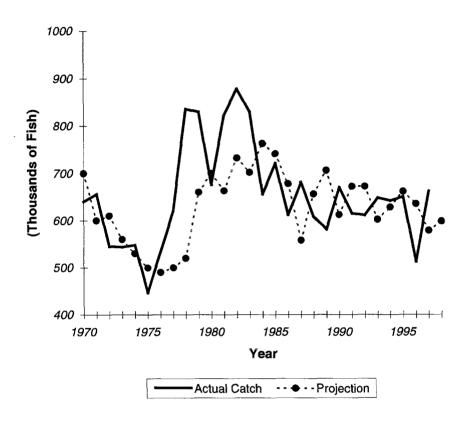


Figure 1. Relationship between actual catch (thousands) and projected catch (thousands) for Alaska chinook salmon from 1970 to 1997, with the 1998 projection.

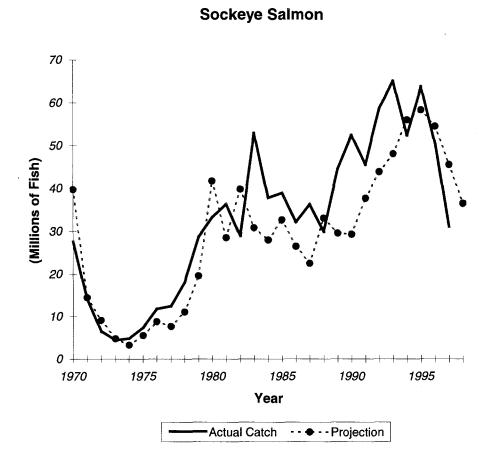


Figure 2. Relationship between actual catch (millions) and projected catch (millions) for Alaska sockeye salmon from 1970 to 1997, with the 1998 projection.

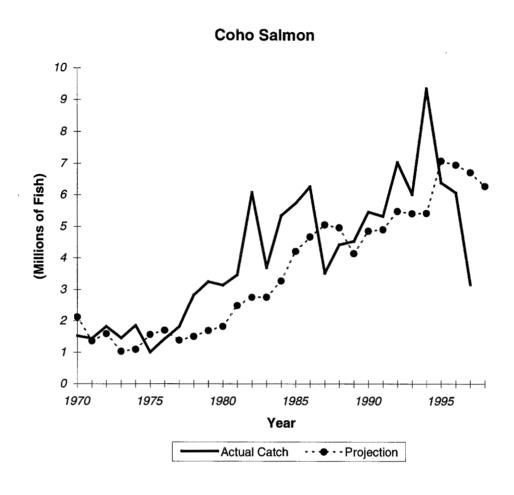


Figure 3. Relationship between actual catch (millions) and projected catch (millions) for Alaska coho salmon from 1970 to 1997, with the 1998 projection.

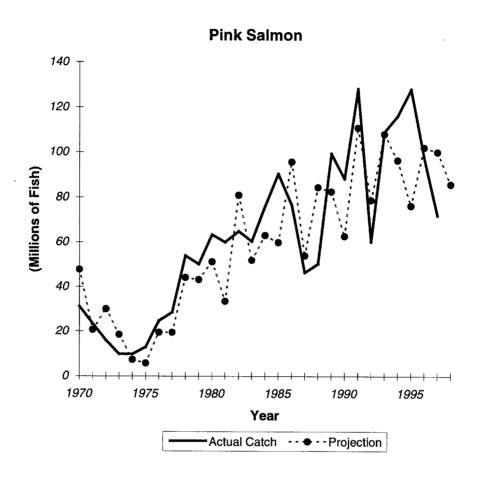


Figure 4. Relationship between actual catch (millions) and projected catch (millions) for Alaska pink salmon from 1970 to 1997, with the 1998 projection.

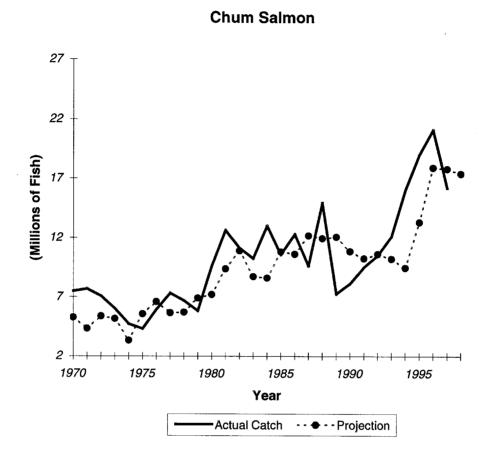


Figure 5. Relationship between actual catch (millions) and projected catch (millions) for Alaska chum salmon from 1970 to 1997, with the 1998 projection.